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ABSTRACT

This conference paper reports on research related to inquiry and how to infuse this approach into teacher training for pre-service elementary teachers. By using personal experiences of a three month visit to California elementary schools and a driving tour of England, these experiences are correlated to inquiry training with a model adapted from Chandler/Taba research work. Social studies curriculum documents of Australia are employed, including "Social Education in the Nineties: A Basic Right For Every Person," to illustrate how this approach can be used to address the goals and objectives specified for the subject in Australia. (EH)

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INITIATING INQUIRY WITH PRE-SERVICE ELEMENTARY TEACHERS

Paper presented at the Third International Social Studies Conference
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INITIATING INQUIRY with PRE-SERVICE ELEMENTARY TEACHERS

> *". . . promoting understandings about society and how to participate in it effectively are achieved through the inquiry process, in which students are encouraged to ask questions and find answers."*
>
> The Social Education Framework P-10, 1987, p19

We have entered the last decade of the twentieth century, in a world perplexed with social problems of a greater magnitude, than have ever confronted the human race before.

The end of the 'eighties saw an upheaval of international politics which gave rise to the need for a total realignment of international relations. The world economy, capable of providing for the needs of the population, is failing to do so and the environment on which we all rely is under threat to an extent never previously experienced. Two months ago, events occurred in the southern part of this continent, the like of which many of us had considered impossible in our lifetime.

On a national scale my 'lucky country' Australia is failing to fulfil the promise of the 'good life' for many of its inhabitants who seem in many respects to be of the opinion that society owes them a living. Whilst acknowledging that poverty is a relative concept, unemployment rates of 11% are ensuring that groups within our society find it difficult to live at what has come to be the accepted standard within the community.

If social studies is concerned with the relationship of people and their fellows and their relationships with the environments - both physical and social, how can we as teachers effectively contribute to our pupils' understandings of this situation and their ability to cope with and change for the better, the society of which they are a part.

The issues and areas of study encompassed in this subject -Social Studies - can create an awareness and understanding of society and develop the life skills needed in social life for these children.

Providing children with experiences in their social studies which allow them to inquire into and think about people is a major concern of this area of the curriculum. This necessitates the development of a range of experiences for the children and also the need to provide a variety of techniques and skills to handle this material effectively.

To study people we need to employ 'people-studying' techniques. This involves learning to:

- *Think about people;*
- *Feel about people;*
- *Value people and the world they live in.*

Coincidently these, together with the development of skills to support them, and where possible opportunities to be involved in some related action are **the 'overall' objectives of social studies.**

In Australia we find ourselves facing:

- increasing knowledge which is making all of us more aware of alternative lifestyles;

- a pluralist society which allows us to be more tolerant of differing perspectives on life;

- technological development which is continually changing the nature of our economy and our environment, compelling some of us to accept alternative life choices.

These phenomena have implications for our life within the Australian society. We are now more aware of alternative life opportunities and are thus in a position to make choices. In other countries throughout the developed world, similar situations are occurring, and amongst the developing nations a realisation that scarce resources and unsympathetic support or the lack of any support is further inhibiting the already scant opportunities for meaningful industrialisation and economic growth. In order to optimise our life chances we not only need to be aware we also need knowledge and skills.

What is Social Studies?

Social Studies is about people and their relationships with others and with their environments.

Remember the children you are teaching will be the decision-makers in the 21st century. If you are dissatisfied, you might become a seeker after meaningful objectives, better processes and more relevant content in Social Studies. Then, the children may:

1. Learn through meaningful, direct and vicarious experiences which are varied and stimulating;

2. Learn about people and people in social groups rather than about things;

3. Learn to seek out relevant data and use it as evidence to explain human behaviour;

4. Learn through the study of themes and units selected to illustrate meaningful understandings;

5. Learn in order to develop knowledge (cognitive domain) and to grow in empathy and sensitivity (affective domain);

6. Learn by using the insights of <u>all</u> the social scientists;

7. Learn to organise their own information retrieval systems;

8. Learn from their own experiences with content and direct observations to develop concepts which will organise and synthesise large numbers of relationships, specific facts and ideas;

9. Learn to locate accurate data and up-to-date information so that they become skilled in research;

10. Learn through full participation in problem-solving discussions;

11. Learn to examine values through the study of authentic examples of human behaviour selected from the classroom, the school, the community and the society at large;

12. Learn by units of inquiry which gather data in order to answer Focus Questions and solve problems;

13. Learn by in-depth studies of examples of social groups, communities, societies, organisations or institutions on a scale appropriate to the experience and development of the learner;

14. Learn about selected societies from represented regions of our planet giving priority to communities and societies of our Asian and Pacific neighbours;

15. Learn about real people in real societies avoiding myths and stereotypes.

In its Rationale and Framework for Social Education entitled *SOCIAL EDUCATION IN THE NINETIES: A Basic Right For Every Person* , the SOCIAL EDUCATION ASSOCIATION of AUSTRALIA, tells us that;

> "Social education is the active process by which people through drawing on personal experience and public knowledge:
>
> - develop and apply UNDERSTANDINGS which help them to explain the origins, diversity and dynamic nature of society, including the interactions among societies, cultures, individuals and environments
>
> - develop and practise VALUES and sensibilities which are crucial to a just and democratic society and a sustainable world
>
> - develop and practise SKILLS in investigating society, discussing issues, tackling problems, making decisions and working co-operatively with others
>
> - take ACTIONS enlightened and empowered by these understandings, values and skills, which might contribute to the achievement of more desirable futures for all."

To ensure that such activity achieves this involvement of the participating students most effectively, and to assist these students in their learning processes, the teaching strategy which best affords these opportunities to our students is the implementation of the Process of Inquiry. How to effectively illustrate this strategy to our trainee teachers has been a concern of this writer for a number of years.

In 1980, participation in a Professional Experience Program offered by the university enabled my family and me to spend three months visiting Elementary Schools and Universities in central and western United States. Part of the time was spent at Escondido Elementary School, which is attached to Stanford University, Palo Alto, California. This school exists mainly to provide an education for the families of the Postgraduate students of the university.

At Escondido, I worked with a Year Four class. The Social Studies program for this level involved a study of the History of California. One part of their study involved 'the settlement of California by the Spanish missionaries in the C18th'.

> In the late C18th Spanish Missionaries travelled North form Mexico to settle the Californian wilderness. The route they followed became known as **EL CAMINO REAL** - 'the Royal Way'. At about a day's journey apart, along this route, they established Missions which provided refuge and shelter for travellers and served

as a base for the Spanish land-holders and religious education for the native Indians - ***San Diego, San Gabriel Archangle, Santa Barbara, San Miguel, San Antonio, San Carlos Borromeo, San Jose and San Francisco.***

This topic was studied by those children, through the method of reading the relevant paragraphs in their text and answering the questions at the end of the chapter.

Between San Jose and San Francisco today, a six-lane highway provides the main road link traversing the length of the southern bay peninsular. It follows almost the same route as the old missionary trail and passes adjacent to Stanford University, and within 200m of Escondido Public School. The name of this highway is EL CAMINO REAL.

In a similar situation, most teachers I know would have initiated the students' study of this topic by going out of the classroom, and taking a walk down to the corner of the street. Perhaps the following scenario might then have occurred.

> *Who can tell me the name of this road? That is a different name for a roadway! Why is it called that do you think? I wonder what language it is? Does anyone know what it means?*

At home a similar situation could arise if you were teaching a topic related to the 'Gold Rushes' and happened to be at one of the several schools elementary and secondary that are located adjacent to or nearby *Mt Alexander Road* which leads now out of 'downtown' Melbourne through the suburbs of Flemington, Moonee Ponds and Essendon. In the 1850s, this was the route followed by those who travelled to the Mt Alexander goldfield to seek their fortune.

The point of such an approach would be to involve the students in finding out for themselves - in other words to initiate **INQUIRY**. This strategy is one to which a chapter of the FRAMEWORKS FOR SOCIAL EDUCATION P-10 is devoted where it is suggested that:

> "The two main goals of social education - promoting understandings about society and how to participate in it effectively - are achieved through the inquiry process, in which students are encouraged to ask questions and find answers."
>
> SOCIAL EDUCATION FRAMEWORK P-10 , p19.

This document which is currently under review, was initially prepared by the Ministry of Education, in the state of Victoria, as a the guidelines for the development of curriculum programs in the school systems within our state. As indicated the document emphasises the use of Inquiry procedures in the implementation of social education curricula with our school students.

A second experience also relates to an overseas trip I took with my family during long service leave in 1987. In order to occupy the children as we travelled around central England my wife suggested that they note down the names of all the PUBS we saw as we passed through the villages and towns of the various Counties. Needless to say we compiled a fairly extensive list.

On examining this list on our return home I realised that we had not only a record of our trip, but also a useful teaching resource - my wife, who is a Geography teacher probably had this in mind all along. It was apparent that several names recurred with great frequency. This was, in some cases, evident on a regional basis, particularly with regard to traditional occupations and sport or leisure pursuits, but in others, apparently the heroic nature or the popularity of the person concerned at a particular time, must have been widespread.

Based on experience some 25 years ago, teaching in Fitzroy, an inner suburb of Melbourne, an inquiry scenario might be:

> *I wonder what life was like for people living here two or three generations ago? Have you noticed how many Pubs there are around here? Why do you think there are so many of them? What would the people do after work? Where would they go? How would they get there?*
> *If we compare this area with another, would we notice the same? Does this tell us anything about the people of these areas?*

Or in a rural town/city within the state of Victoria:

> *What is the names of the Hotels in this town? Where are they located? Where is the town centre? Where is the railway station? Who would stay in these establishments? What are the names of the Hotels in the next town? Where are they located? What can this tell us about the former lifestyle of this town?*

As the SOCIAL EDUCATION FRAMEWORK P-10 reminds us;

> "An investigation may arise from a number of situations. It may be part of a planned school program which reflects students' interests, explores a significant issue, or focuses on an important aspect of our society and culture Alternatively, it might arise spontaneously, sparked by an individual student's experience or an important event."
> SOCIAL EDUCATION FRAMEWORK P-10, p19.

The question remains however, how can we assist our young trainee elementary school teachers to successfully adopt this strategy as a means of implementing their social studies lessons? It appears that the best way to implement INQUIRY with elementary children is to ask them questions to which they are encouraged find answers. Confronted with such data as outlined above, or any other similar data, one can ask one's students a series of questions to initiate an INQUIRY.

The inquiry process consists of teaching strategies and learning activities that encourage systematic student investigation. It is through this **process** that the students develop their knowledge as they seek the answers to their questions, and their ability to participate effectively within a variety of social settings as they develop their skills whilst pursuing their investigations. The teachers role in this process is to facilitate and guide the ongoing inquiry. **To Inquire** means that one is **finding out** i.e. carrying out an investigation.

> "In an inquiry-oriented classroom the teacher's role is to manipulate the environment to create appropriate problems and stimulate questions and investigations among children. Instead of being the main source of information for the children the teacher guides them in finding the information for themselves and in addressing it to their questions." (KALTSOUNIS, 1979.)

In order to assist elementary children to pursue an inquiry that is based on a series of questions, we need to structure those questions into a useful format. **A FOCUS QUESTION** might be used to **focus** the children's attention on *what they are going to find out* as a result of their inquiry into this topic.

Then for each part of the topic to be investigated, develop **Contributing Questions** which will allow the children *to explore* that aspect of the topic.

THUS

Focus Question: ***How Do People Use The Sea?***

Main Idea - (Answer to the Focus Question):

> ***The extent of the world's oceans have isolated communities of people and led to exploration of the earth for raw materials and new regions for settlement. People have traditionally used the sea to obtain their food and in order to transport people and goods from one region to another. Contemporary use also involves the development of energy sources and the search for minerals and for recreational activities.***

Contributing Questions:

- **What is the sea like?**
- **What do we get from the sea?**
- **Why do people live near the sea?**
- **How do people use the sea for -food?**
  -transport?
  -leisure?
- **Which groups of people use the sea?**
- **Who helps these people?**
- **How do people obtain the resources of the sea?**
- **Who keeps the sea safe?**

For each of these Contributing Questions activities will be planned by the teacher to allow the children to investigate that particular aspect of the topic.

Contributing Questions may also be raised by the children themselves.

To stimulate the children's questions the teacher might initially ask;

- What would you like to know about . . . ?
- What puzzles you about . . . ?

The questions to which the children might wish to find answers can be collated and then used in one of the following ways;

- as additions to and/or replacements for the planned **Contributing Questions**,
- as a means for individual research,
- to compile a **Question Bank** for use in evaluation.

Whatever their source, **Contributing Questions** form the initial point from which the investigation of the topic commences. It is the children's attempts to find an answer to these questions that involves them with the content illustrating that aspect of the topic which they are investigating.

Whilst a teacher may plan a topic around some specific questions so that the children will, in answering those questions, develop an understanding of the Organising Ideas illustrated by the content, the children will be motivated by the experience of the investigations.

Inquiry in Social Studies draws upon the methods developed and used by the Social Scientists as a result of their studies into the behaviour and development of humans in their

social environment. Of course, these methods need to be adapted so that children of primary school age can make use of them, however as the children involve themselves in the investigation of the ***community around them*** they utilise the tools and techniques of ***Sociologists.*** Similarly the tools and techniques of *Anthropologists, Economists, Historians* and *Geographers* are used when appropriate.

An adaptation of the *Model of investigation used by Social Scientists* and suitable for use in Primary School Social Studies, is outlined below.

THE INQUIRY APPROACH (Adapted from CHANDLER/TABA)

Presenting children with an idea or situation that is puzzling, challenging or provocative; deciding on the BIG QUESTION or Problem for Investigation.	)))	**FOCUS QUESTION**
Guessing and discussing possible solutions - HYPOTHESISING		
Using the HYPOTHESIS to help form study questions that will guide the investigations into aspects of the BIG QUESTION.	))	**CONTRIBUTING QUESTIONS**
Deciding on the **RESOURCES** likely to provide the information needed to answer the CONTRIBUTING QUESTIONS eg. pamphlets, photographs, slides, maps, simulation games etc.	*	**N.B.**
Locating, selecting and gathering the information and recording the data so that it can be readily and accurately used.		)**Skill**)**Dimension**
Analysing and Interpreting the Information.		
(i) Listing, grouping and labelling the categories of data.		
(ii) Generalising and inferring by relating ideas (labels), explaining such **cause and effect** relationships, and then going beyond that given.		))**Knowledge**)**Dimension**)
(iii) Testing the validity of earlier HYPOTHESES		)
(iv) Applying the GENERALISATIONS to explain a new situation; perhaps developing further HYPOTHESES and new QUESTIONS for further investigation.		) }**Action**)**Dimension**
Explaining feelings of the PEOPLE studied, and the feelings of the children themselves in similar or related situations.		)))**Values**)**Dimension**
Analysing the reason for such attitudes, examining the VALUES		)

In Victorian Primary schools, the traditional curriculum of **Social Studies** has been concerned with ***persons; their relationships with each other and with their environments.*** In other words, social studies programs aim to develop student's knowledge

of the social condition of people and how to deal with it. To accomplish this, the Framework document suggests that the investigations students carry out ought to emphasise the use of the **Inquiry Process**. As the document points out, the two main goals of Social Education are achieved through use of this process.

> ... students are encouraged to ask questions and find answers.

The following statement reflects both the intent and the reality of any Social Education program that implements an effective process of *INQUIRY*.

> *"Programs ought to develop young adults who will say,*
> ***'I know what's going on, I'm part of it, and I'm doing something about it.'"***
>
> The Social Education Framework P-10

Having selected a topic for study, preferably from the school course of study which details the range and sequence of studies planned for the elementary school life of the children to allow for the development of knowledge and skills over the seven years of their primary school experience, the first step is to express that topic in the form or a Focus Question.

Topic for Year 4: *Transport in our Community.*

Focus Question: ***How are People and Goods moved from place to place?***

The next step is to develop a **Main Idea** - a written statement - that provides an answer to the Focus Question and thus expresses the **knowledge** about the social world that the children will develop as a result of their inquiry into the topic. The Main Idea in fact identifies and links together the social science concepts illustrated by content of this investigation.

Main Idea: ***In our community, people use both public and private transport to move from one location to another to obtain employment, goods and services and meet their leisure needs. As well transport is important to produce and distribute goods within and between regions and over distances.***

An analysis of this Main Idea identifies following social science concepts **location**, **goods and services**, **needs**, **production** and **distribution**, which will be illustrated by the content of this study and about which the children will develop a better understanding.

The next step is to develop a Flow Chart of the aspects for study in this unit of work. This Flow Chart should include all the possibilities that the planning teacher(s) can identify - use a 'Brainstorming Approach' to list these. Having listed all possibilities in terms of specific content, the role of the teacher is to select from the possibilities, those aspects which will be of most relevance to the children. Factors like the interests of the children, their needs in terms of both knowledge and skill development, the ability of the content to illustrate the chosen concepts, together with the availability of resources will need to be considered when making these decisions.

Having decided which aspects of the topic will be explored by the children the task is to then structure these into investigations that the children can pursue. This is best achieved by framing them in terms of **Contributing Questions** to which the children are most likely to respond by seeking answers. Some possibilities for such questions are as follows.

Contributing Questions:

What is Private Transport?
What is Public Transport?
How are goods transported to the shops?
How is produce transported from the farm to the factory?
How do People get to work?
How do I come to school?
How does our family travel on holidays?
Will transport be the same next century?

As suggested above, additional questions may be added following the Introductory session with the children. For each of these an investigation will need to be planned so that the children can develop an answer to the question.

The final stage is to plan a sequence of activities that will allow the children to explore each of the Contributing Questions. One way of organising these activities is to use the arrangement suggested by Fraenkel (1973). Each type of activity serves a specific purpose thus:

Intake:	To provide the children with the information so that they are able to investigate the question.
Organisation:	To assist the children to understand the information - make sense of it in their own minds.
Demonstration:	To show what they have learnt as a result of their investigation.
Expression:	To provide the children with an opportunity to reflect on the experience of this investigation.

The following example will illustrate a possible sequence developed using this approach.

Contributing Question:
How do we get to work?

INTAKE
Show a film of the various forms of transporting People and Goods.
ORGANISATION
List the forms of transport seen in the film that are used to move People.
INTAKE
Interview adult friends and relatives, asking them how they travel to work, school, shopping centre etc.
Was it the same 20 years ago?
ORGANISATION
As a grade collate the survey results.
Make two large graphs showing the means of transport according to popularity.
DEMONSTRATION
Groups to take one of the forms of transport, discuss its use and report on the appropriateness of that form of transport.
EXPRESSION
Draw a series of cartoons illustrating what would happen in the event of a Transport Strike.

Using this approach it has been possible to demonstrate an effective strategy for involving the children in the Inquiry process to the student teachers with whom we work at Deakin University. The *Social Education Framework P - 10* , published as the official guidelines for Social Education in the state of Victoria reminds us;

Social Education has two main goals.

- **to enable students to know about their own society**

and - **to enable students to participate effectively in society**

Thus, Social Education has a role which is <u>important both to the individual and to society</u> - **contributing to the social education of the citizenry**. The frameworks document emphasises that these goals are best achieved through the use of the Inquiry process.

The Framework document also suggests that Social Education is a LIFELONG PROCESS. In this case the work undertaken at the elementary level of education becomes very significant since it will establish patterns of both concept development and social understanding and social interaction.

> "Becoming socially educated is a lifelong process. An individual's understandings about society are constantly expanded and refined, decision-making and problem solving skills become more sophisticated, value systems become more complex and opportunities to act increase as the individual matures. Consequently, social education in schools must be seen as taking place over the full range of year levels, with each year of a student's experience building on the previous ones and establishing a basis for what is to follow. Social education will also build on understandings about the individual and self that are developed in other areas of the curriculum. . . "

It is with this principle in mind that we have developed the approach outlined above and suggest it for your consideration. The present move towards National Curriculums, Standards and Profiles does not in our opinion preclude this approach from being adopted and implemented, since many of the reasons for such moves, will be supported by an Inquiry approach to the teaching of this curriculum, particularly at the elementary level of social education.

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